



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,572	09/01/2006	Andrew Clive Jackson	2004CH006	6232
25255 7590 04/07/2009 CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205				
EXAMINER				
AHVAZI, BILAN				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
04/07/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/591,572

**Applicant(s)**

JACKSON, ANDREW CLIVE

**Examiner**

Bijan Ahvazi

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

Art Unit: 1796

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable

over claims 1-25 of U.S. Patent No. 6,911,116 B2,

over claims 1-13 of U.S. Patent No. 7,198,731 B2.

Although the preambles are different, and the conflicting claims are not identical; they are not patentably distinct from each other because the present claims indicated above also cover compositions which overlap with the claims of the copending applications above, and thus, render the present claims ***prima facie*** obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "preservatives or complexing agents" are not properly defined.

***Claim Rejections - 35 USC § 102/103***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b)/103(a) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

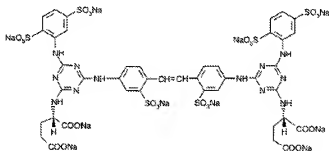
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 5-6, 9-10, 11 and 12-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rohringer *et al.* (WO 98/42685).

Art Unit: 1796

7. Rohringer *et al.* disclose new compounds, in particular 4,4'-diaminostilbene-2,2'-disulfonic acid compounds which are useful as fluorescent whitening agents or for inhibiting (quenching) the effect of anionic fluorescent whitening agents on substrates (Page 1, lines 1-3). Rohringer *et al.* disclose an aqueous solution comprising an optical brightener of formula (1) as shown below in Example 9 (Page 23) corresponding to the instant applicant's limitation claims 1-2.



Rohringer *et al.* disclose a method in which the paper coating composition is prepared by mixing the components in any desired sequence at a temperature from 10 to 100°C (Page 34, Claim 22), in which the components also include customary auxiliaries which can be added to regulate the rheological properties of the coating compositions (Page 34, Claim 23), wherein the auxiliaries are natural binders, cellulose ethers, alginic acid, alginates, polyethylene oxide or polyethylene oxide alkyl ethers, copolymers of ethylene oxide and propylene oxide, polyvinyl alcohol, water-soluble condensation products of formaldehyde with urea or melamine, polyphosphates or polyacrylic acid salts (Page 34, Claim 24) corresponding to the instant applicant's limitation claim 5. Rohringer *et al.* also disclose the method of producing the optical brightener of formula (1) as shown in Example 9 (Page 23), wherein the free acid corresponding

Art Unit: 1796

to the sodium salt of formula (1) is precipitated in acetone using HCl and the free acid so obtained is filtered off with suction. The filter residue is then dissolved in 100 mls of water and the solution is adjusted to pH 8.5. After evaporation and drying, there remain 17.5 g (67% theory) of the compound of formula (1) corresponding to the instant applicant's limitation claims 6, 8 and 11. Rohringer *et al.* provide a method for the fluorescent whitening of a paper surface, comprising contacting the paper surface with a coating composition comprising a white pigment; a binder dispersion; optionally a water-soluble co-binder (silent on solubilizing agent); and sufficient of a fluorescent whitening agent having the formula (1), to ensure that the treated paper contains 0.01 to 1 % by weight, based on the white pigment, of a fluorescent whitening agent having the formula (1) (Page 5), wherein the white pigment component is an aluminum or magnesium silicate, barium sulfate, satin white, titanium dioxide, calcium carbonate (chalk) or talcum (Page 33, Claim 15) corresponding to the instant applicant's limitation claim 9, wherein the method for the fluorescent whitening of paper comprising adding the fluorescent whitening agent having the formula (1) to an aqueous paper pulp in the wet end (Page 34, Claim 27) corresponding to the instant applicant's limitation claim 10.

Claims 12 and 13 are viewed as product-by-process claims and hence the methods they are created by are not pertinent, unless applicant can show a different product is produced. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See MPEP 2113. "There is nothing inconsistent in concurrent rejections for obviousness under 35 USC 103 and for anticipation under 35 USC 102." See MPEP 2112(III). Rohringer *et al.* further disclose a method for the fluorescent

whitening of a paper surface comprising contacting the paper in the size press with an aqueous solution containing a size, optionally an inorganic or organic pigment and 0.1 to 20 g/l of a fluorescent whitening agent having the formula (1) corresponding to the instant applicant's limitation claim 14.

Since Rohringer *et al.* teach the same composition and method as claimed, the aqueous solution composition of Rohringer *et al.* would inherently be the same as claimed (e.g. amount of 0.214 ml/kg and no solubilizing agent). If there is any difference between the product of Rohringer *et al.* and the product of the instant claims, the difference would have been minor and obvious. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. See MPEP 2112.01(I), *In re Best*, 562 F2d at 1255, 195 USPQ at 433, *Titanium Metals Corp v Banner*, 778 F2d 775, 227 USPQ 773 (Fed Cir 1985), *In re Ludtke*, 441 F2d 660, 169 USPQ 563 (CCPA 1971) and *Northam Warren Corp v D F Newfield Co*, 7 F Supp 773, 22 USPQ 313 (EDNY 1934). The composition of Rohringer *et al.* would inherently possess the recited limitation such as storage –stable because same ingredients and condition are utilized. Rohringer *et al.* teach all the limitations of the instant claims. Therefore claims 1-2, 5-6, 9-10, 11 and 12-14 are as being anticipated by Rohringer *et al.* Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within generic disclosure of the prior art.

Regarding the recited "for preparing a storage-stable aqueous solution" in the instant applicant's limitation claim 6 and the recited " for brightening paper in a pigmented coating composition in the instant applicant's limitation claim 10, "if the body of a claim fully and

intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohringer *et al.* (WO 98/42685) as applied to claims 1-2, 5-6, 9-10, 11 and 12-14 above, and further in view of Farrar *et al.* (Pat. No. US 6,911,116 B2).

10. Rohringer *et al.* discloses the features as discussed above. However, Rohringer *et al.* do not expressly disclose that the method, wherein the removal of the alkali metal of amines salt is done by membrane filtration. Farrar *et al.* disclose cationically modified white pigments, their production and use (Col. 1, lines 49-50). Farrar *et al.* disclose that the obtained aqueous composition of (P<sub>AB</sub>) is an aqueous solution, i.e. a true or at least colloidal solution. It may be used directly as produced, or—if desired—it may be modified in salt content and/or concentration



e.g. by membrane filtration, and/or it may be combined with any further desired components, e.g. with an additive that stops the growth of disturbing micro-organisms or with a biocide e.g. in a concentration of 0.001 to 0.1% by weight referred to the liquid composition (Col. 11, lines 63-67; Col. 12, lines 1-4 ) corresponding to the instant applicant's limitation claims 7, and 8. Since it has been held that where general conditions of the claim are disclosed in the prior art, discovering the removal of the alkali metal or amine by ultrafiltration or membrane filtration involves only routine skill in the art. Therefore it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within generic disclosure of the prior art.

Regarding the recited wt ranged in the instant applicant's limitation claims 3 and 4, The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

#### ***Examiner Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijan Ahvazi, Ph.D. whose telephone number is (571)270-3449. The examiner can normally be reached on M-F 8:0-5:0. (Off every other Friday).

Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BA/  
Bijan Ahvazi,  
Examiner  
Art Unit 1796

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

04/3/2009